CELLI®

Italian design for better drinking

USE AND MAINTENANCE MANUAL

CE

TE MIX 15 - 25 - 35 - 50 - 65/L



ORIGINAL ISTRUCTIONS

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1 - Safety

CAUTION



This equipment requires regular maintenance to guarantee the drinking quality standards of the chilled water with added carbon dioxide.

Do not allow anyone to operate the machine unless suitably trained.

Keep the machine in good working order and do not allow any modifications to be made to it unless these have been authorised by the manufacturer.

Before using the machine, read this section of the manual carefully; it instructs operators in the correct use of the machine, and warns of improper use which may be hazardous.

1.1 Intended use

The**TE MIX/L** range of machines (mod. **15** - **25** - **35** - **50** - **65**) are refrigerators that dispense sparkling water and still water, obtained by mixing water and CO_2.

1.2 Improper use

This machine is designed for the use and conditions envisaged in this manual, in compliance with Machine Directive 2006/42/EC.
The use of the dispenser for any purposes other than those for which it was designed is not allowed, under any circumstances. Likewise, its use in any way other than that indicated in this manual is forbidden.

This machine is not intended to be used by people (including children) with reduced physical or sensory capacities, or with a lack of experience and knowledge, unless under supervision and with the instructions of someone responsible for their safety. Make sure that children do not play with the dispenser.

For the purposes of your safety, and in accordance with the current legislation, any repair operations on the machine must be carried out by the Service Centre.

- Do not alter or tamper with the internal dispenser components; if they do not work well, contact the Service Centre.
- Do not place any objects on the dispenser.
- Do not place the dispenser on top of any other object.
- Do not use liquids other than those indicated.
- If you believe the dispenser to be damaged, contact the Service Centre.

1.3 List of hazards

The following list of hazards draws attention to safety aspects which must be considered at all times by anyone using the machine.

DANGER



CO_2 (CARBON DIOXIDE)

CO_2 bottles must always be stored in a well-ventilated place where the air can flow in and out. Great care must be taken to prevent CO_2 leaks throughout the system, including the gas bottles. If a CO_2 leak is suspected, especially in a small area, ventilate the contaminated area at once. Persons exposed to high concentrations of CO_2 will experience trembling, swiftly followed by unconsciousness and suffocation.

DANGER



MAINS ELECTRICITY

Always disconnect the machine from the electricity supply before doing any work on it, to prevent damage and health hazards.

DANGER



POSITIONING THE GAS BOTTLE

To prevent the risk of injury or damage, the CO_2 bottle must always be kept in a vertical position against a wall, held in place by a chain fixed to a bracket.
Do not expose the bottle to heat sources or very low temperatures.
If a disposable CO_2 bottle is used, secure it vertically to prevent it from falling or overturning.

DANGER



REFRIGERANT

The refrigerant used is R290 or R134a. To verify which of these two is used, refer to the compressor label inside the machine, and the nameplate.
In the case of R290 refrigerant, this is a natural gas with a high degree of environmental compatibility, but it is also combustible. During the transport and installation of the machine, be careful not to damage any part of the refrigerating circuit.
If the refrigerant spurts out, it may catch fire or cause injury to the eyes. If you notice a leak, do not take any naked flames or potential ignition sources near the machine; air the room for a few minutes.

WARNING



REFRIGERANT

To avoid the formation of an inflammable mix of gas and air in the event of a leak in the refrigerating circuit, the size of the room where the machine is located will depend on the amount of refrigerant used.
Never switch the machine on if you notice any trace of damage. If you have any doubts, please contact CELLI S.p.A.
The room must measure at least $1m^3$. for every 8g of R290 refrigerant used in the machine.
The amount of refrigerant in the machine is shown on the nameplate.

WARNING



AUTHORISED TECHNICAL STAFF

Only technical staff skilled in the electric, hydraulic or refrigeration field may carry out work on the machine. All wiring and plumbing components must comply with national and local legal requirements (when replacing components, use only genuine parts certified by CELLI S.p.A.).

CAUTION



ELECTRICAL REQUISITES

The electrical circuit must be correctly earthed and connected by means of a suitable differential safety breaker.

CAUTION



PLUG SUPPLIED

Connect the machine to the electricity mains using the plug provided.
If you need to replace the plug, use an equivalent model type-approved for the country of use.

CAUTION



SANITISATION

Before sanitising the machine, carefully read the instructions given by the sanitisation product manufacturer and put on all the necessary personal protective equipment (gloves, masks, etc.).
Ensure that the premises are well ventilated.
Sanitisation procedures must only be carried out by skilled technical service staff.

CAUTION



LOW TEMPERATURE

If the machine is exposed to temperatures below 0°C, the water inside it may freeze and cause damage to the machine itself.

CAUTION



LIQUID CHECK VALVE

The carbonator liquid check valve should be inspected after any interruption in the water supply (plumbing work, earthquakes, etc.), and at least once a year in normal conditions. If particles are trapped in the control valve, the CO_2 might flow back into the water supply system.

1.4 Residual risks

During regular operating conditions the machine is safe. There are still residual risks, listed in the hazard list, which are reduced if the machine is used correctly and according to the instructions given in the user's manual.

2 - General information

The Use and Maintenance Manual is an integral and essential part of the machine and must be given to the user. It must be kept in a safe place and read carefully, since it provides specific information concerning the operation, maintenance and safety of the machine and of persons and/or objects that come into contact with it.
If in doubt concerning the instructions supplied in the manual, contact CELLI S.p.A..
The manufacturer cannot be held liable, within or outside the terms of the contract, for any damage caused by inappropriate machine installation and usage, or failure to observe the instructions provided.

The manufacturer reserves the right to modify the product and the relative technical documentation at any time and without notification, and cannot be held liable for any errors or inaccuracies in the contents of this manual.
This version of the Use and Maintenance Manual describes the characteristics of the standard production machine as of the date of printing.

2.1 Manufacturer's details

CELLI S.p.A.

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celli@celli.com

Contact CELLI S.p.A. for any technical queries or to order spare parts.
When replacing machine parts, you are advised to use original spare parts; the manufacturer cannot be held liable for any reduction in machine performance or damage caused by the use of non-original parts.

This manual refers to the standard version of the machine.
Non-standard machines may display minor differences not described in this manual.
If you have any doubts, please contact CELLI S.p.A.

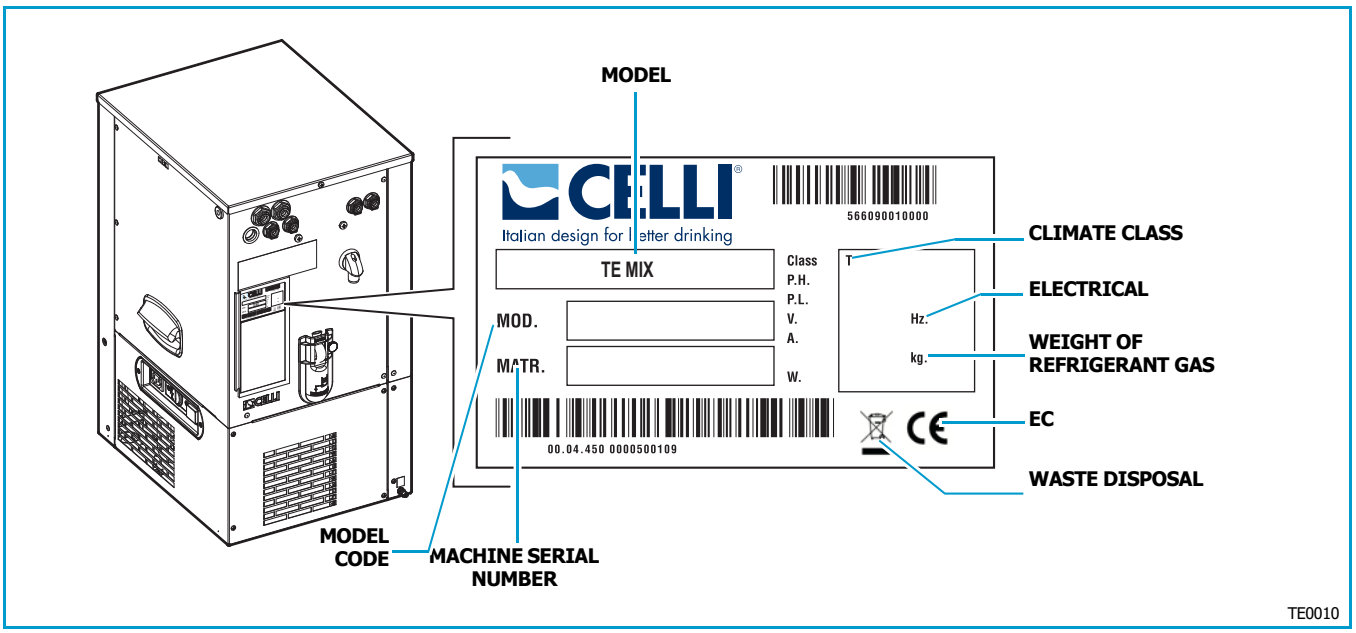
2.2 Machine identification

This manual refers to the following machines:

TE MIX/L UNDERCOUNTER

Models:
- **TE MIX 15**
- **TE MIX 25**
- **TE MIX 35**
- **TE MIX 50**
- **TE MIX 65**

Check that the machine delivered to you carries the nameplate (EC nameplate) shown below:



This indicates the model, the serial number and all the machine technical data necessary for ordering spare parts or reporting technical problems to the technical support service.

2.3 Warranty

For the warranty terms, please refer to the general conditions of sale in the CELLI S.p.A. price list.

2.4 Symbols used in the manual

The manual uses the following safety symbols to draw the operator's attention to all operations which must be strictly observed in order to prevent injury to persons or damage to the machine.

DANGER



Indicates the existence, on or around the machine, of an imminent risk of death or severe injury for the operator and other persons; it is therefore essential to take the greatest care and proceed with the greatest caution.

WARNING



Indicates the existence, on or around the machine, of a potential risk of death or severe injury for the operator or other persons; it is therefore essential to take great care and proceed with the greatest caution.

CAUTION



Indicates the existence, on or around the machine, of a potential risk of minor injury for the operator or other persons; it is therefore essential to take great care and proceed with the greatest caution.

2.5 Staff qualification

To ensure that all works performed on the machine are carried out in conditions of safety, the operators must have the qualifications and meet the requirements for performing the tasks assigned.

The operators are classified as follows:



SPECIALISED MAINTENANCE TECHNICIAN
Operator qualified to perform complex operations in particular situations.
This is an operator properly trained through specific activities.



MACHINE OPERATOR
Non qualified operator or operator without specific skills, assigned to perform only simple tasks or to use the machine by means of the controls of the same and to carry out simple cleaning and replacement of products, following the instructions in this user's manual when using the machine.
He/she cannot carry out the operations assigned to specialised maintenance operators.



The symbol at the beginning of each section indicates the staff authorised to perform the operations described.

3 - Description of the machine

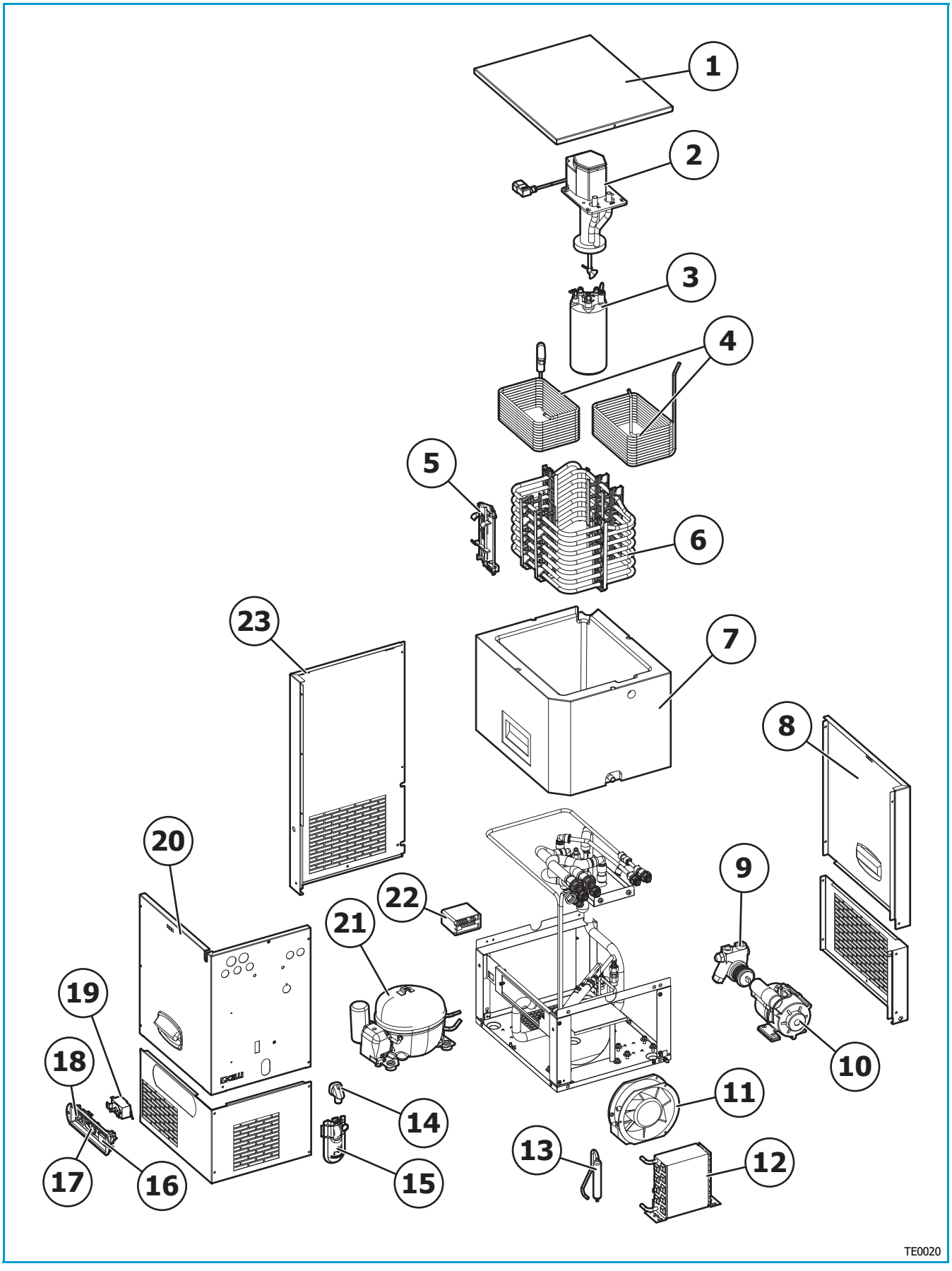
The **TE MIX/L** machine (models 15 / 25 / 35 / 50 / 65) is a water dispenser directly connected to the water supply (sometimes with a filter), to dispense:

- still water at room temperature
- still chilled water
- sparkling chilled water

The dispenser is compact and easy to install. It's ideal for positioning beneath the sink or work-top, thereby leaving the work surface free.

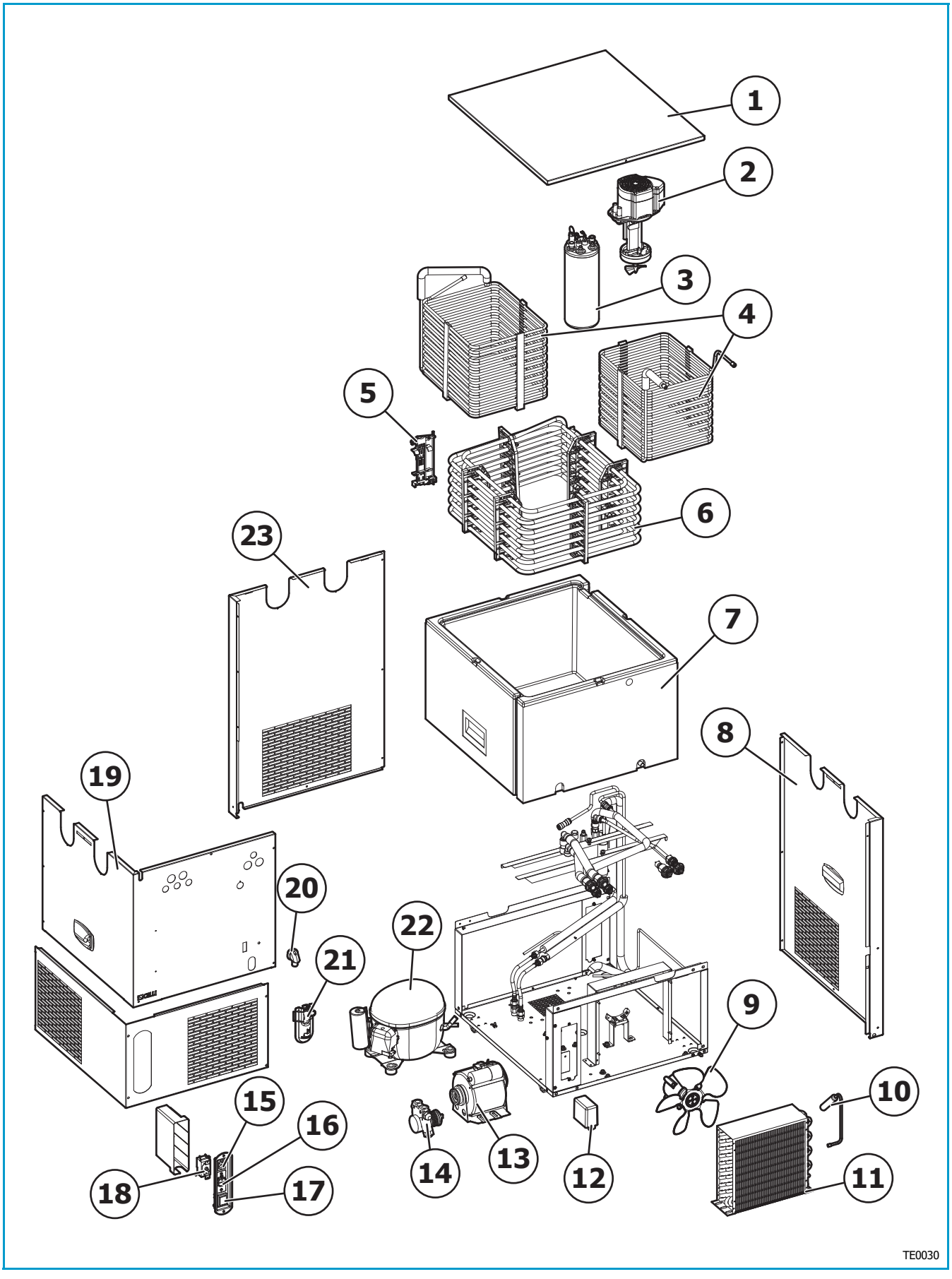
It does not have a dispensing button: the water is carried through thermally insulated plastic tubes from the external environment to the dispensing tower.
The insulating tube (known as the "python") and the dispensing tower are not included with the machine.

3.1 Main components of the TE MIX 15/L



1 - *UPPER COVER*
2 - *STIRRER PUMP*
3 - *CARBONATOR*
4 - *COILS*
5 - *BRACKET FOR THERMOSTAT CAPILLARY TUBE*
6 - *EVAPORATOR*
7 - *INSULATING TANK*
8 - *SIDE PANEL*
9 - *CARBONATION PUMP*
10 - *CARBONATION PUMP MOTOR*
11 - *FAN UNIT*
12 - *CONDENSER*
13 - *DEHYDRATOR FILTER*
14 - *OVERFLOW DRAINAGE*
15 - *DRAINAGE POINT FOR EMPTYING TANK*
16 - *ON/OFF LIGHT SWITCH*
17 - *THERMOSTAT KNOB*
18 - *RECIRCULATION PUMP SOCKET*
19 - *MECHANICAL THERMOSTAT*
20 - *FRONT/SIDE PANEL*
21 - *COMPRESSOR*
22 - *LEVEL CONTROL UNIT*
23 - *REAR PANEL*

3.2 Main components of the TE MIX 25 - 35 - 50 - 65/L



1 - *UPPER COVER*
2 - *STIRRER PUMP*
3 - *CARBONATOR*
4 - *COILS*
5 - *BRACKET FOR THERMOSTAT CAPILLARY TUBE*
6 - *EVAPORATOR*
7 - *INSULATING TANK*
8 - *SIDE PANEL*
9 - *FAN AND FAN MOTOR*
10 - *DEHYDRATOR FILTER*
11 - *CONDENSER*
12 - *LEVEL CONTROL UNIT*
13 - *CARBONATION PUMP MOTOR*
14 - *CARBONATION PUMP*
15 - *RECIRCULATION PUMP SOCKET*
16 - *THERMOSTAT KNOB*
17 - *ON/OFF LIGHT SWITCH*
18 - *MECHANICAL THERMOSTAT*
19 - *FRONT/SIDE PANEL*
20 - *OVERFLOW DRAINAGE*
21 - *DRAINAGE POINT FOR EMPTYING TANK*
22 - *COMPRESSOR*
23 - *REAR PANEL*

3.3 Operating principle

The machine consists of a cooling unit and a hydraulic unit. The cooling unit cools the water in the insulating tank, thanks to an evaporator (**A**) immersed in the tank itself.

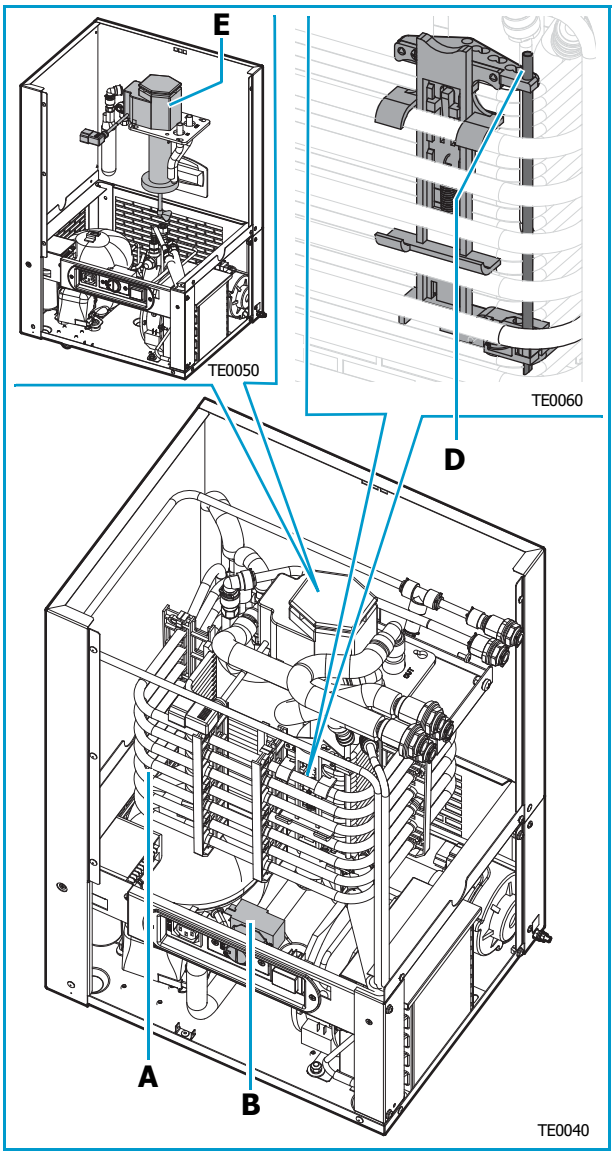
The water in the insulating tank acts merely as a means of heat exchange between the coils and the evaporator.

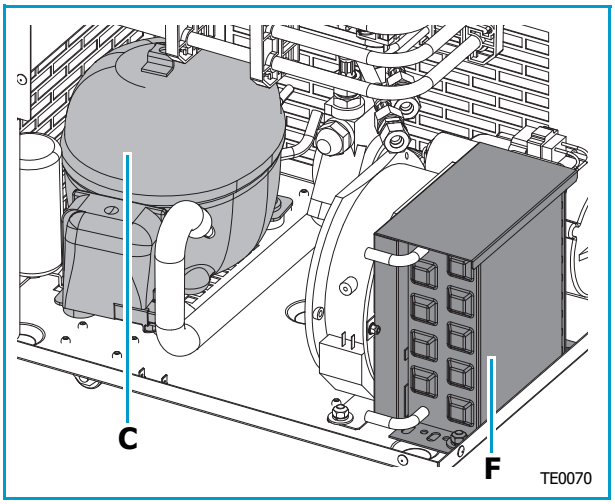
The evaporator is cooled until its temperature is lower than zero, so a layer of ice (the "ice bank") then forms around it; this is in practice a cold reserve, to be used when consumption levels increase.

The thickness of the ice bank is controlled by a mechanical thermostat (**B**), which starts and stops the compressor (**C**) as necessary. The thermostat is fitted with an adjustment knob which, when turned to its maximum setting, allows the ice bank to form.
The thermostat has a capilliary tube positioned on a bracket (**D**); the position of this bracket determines the thickness of the ice bank.

The coils, through which the still water and the sparkling water pass, are immersed in the water in the tank.
The water in the tank is always kept moving thanks to the recirculation pump (**E**); this facilitates the heat exchange between the coils and the ice bank.

The condenser (**F**) dissipates the heat extracted from the water and generated by the compressor motor. For more effective heat dispersal, the condenser has a cooling fan unit.





It is important not to obstruct the condenser surface and to inspect it for dirt regularly to keep it functioning at top efficiency (see 6.7 - "Cleaning the condenser").

In order to operate well, the machine must be continuously powered; switching off the motor of the pump-stirrer, or the machine itself during brief periods of non-use, will jeopardise both the machine's lifespan and the quality of the first water subsequently dispensed. Furthermore, the machine consumes much more energy to restore the ice bank than to maintain it, so you are advised to leave the machine switched on during the night and during any brief periods of non-use.
To keep it cool on its journey from the machine to the dispensing tower, the water passes through plastic tubes with a thermal insulation cover of suitable thickness, the so-called "python". Inside the python, the still water and sparkling water tubes are in contact with two tubes with a bigger diameter; these carry cold water pumped from the tank by means of a recirculation pump.

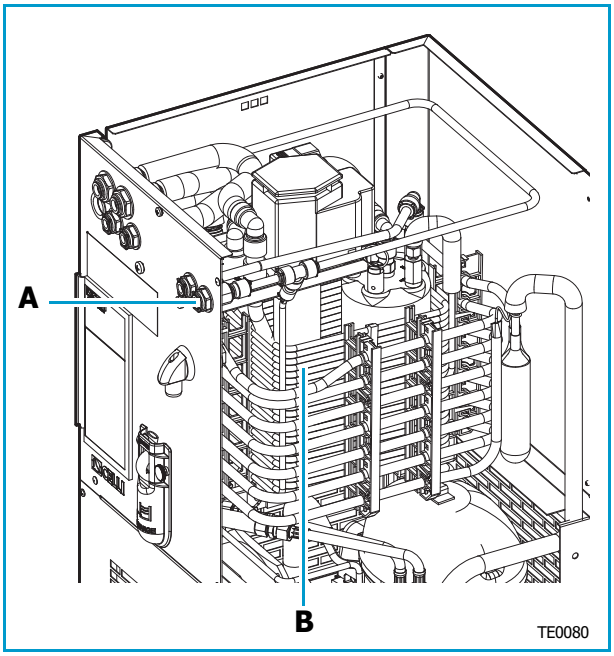
3.3.1 Stirring and water recirculation

To ensure that still water and the sparkling water are always dispensed from the taps cold, the water in the insulating tank is continuously stirred and recirculated in the python by means of the recirculation pump. This solution keeps the still water and the sparkling water at a constant temperature. You are advised to choose a recirculation pump suited to the size of the tank and the distance (and difference of level) between the machine and the dispensing tower.

CELLI S.p.A. can supply the right model for your own specific needs.

Still water

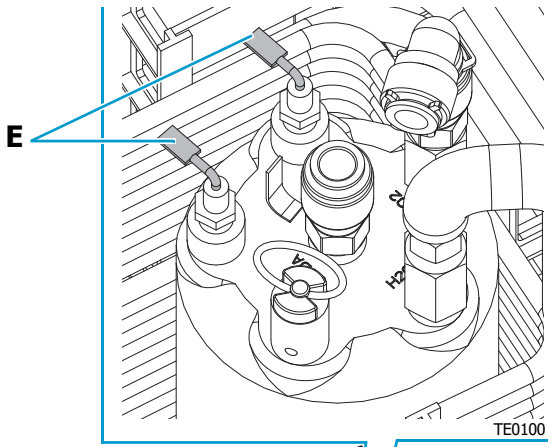
When the dispensing of still water is required, the water, taken directly from the water mains (after having been micro-filtered if necessary), enters, through the water intake connection (**A**), the coil for cooling still water (**B**); here it cools, and comes out of the machine at a low temperature, ready for dispensing.
The room temperature water is sent directly to the dispenser.

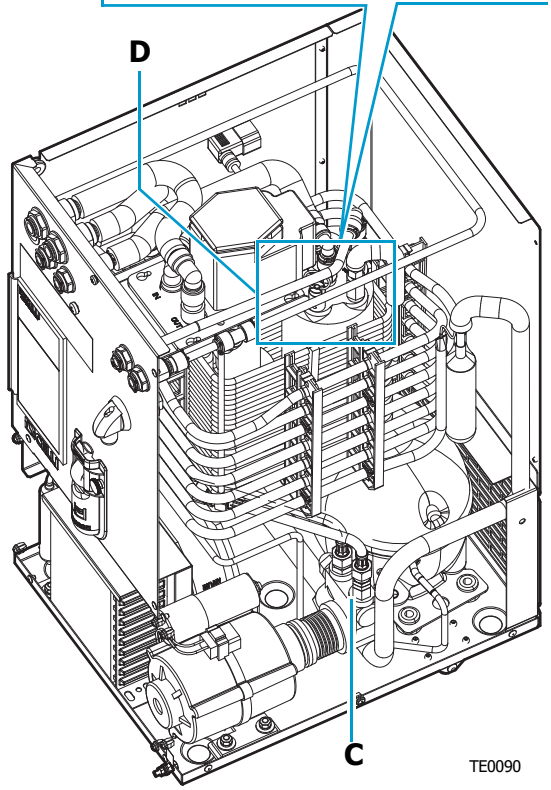


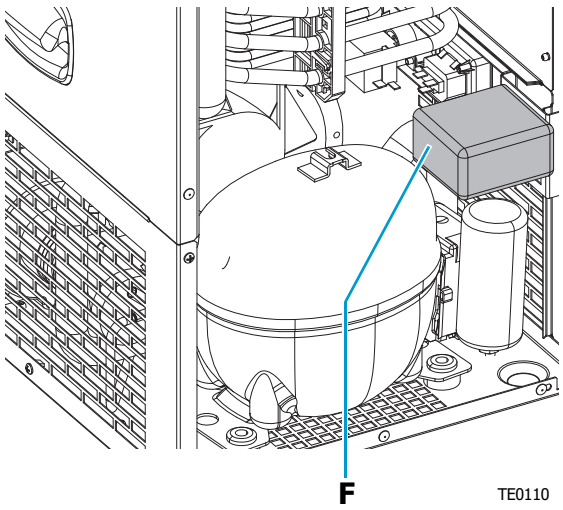
Sparkling water (soda)

When carbonated water is required, the water, pushed by the pump (**C**) crosses the soda loading coil up to the carbonator (**D**); here it comes into contact with the CO_2 (carbon dioxide), instantaneously absorbing it and becoming fizzy.

Inside the carbonator, immersed in the chilled water, there are two level probes (**E** - max. and min.) connected to the level control unit (**F** that starts and stops the pump, guaranteeing the correct supply of water to the carbonator.







3.4 Technical data

	TE MIX 15/L	TE MIX 25/L	TE MIX 35/L	TE MIX 50/L	TE MIX 65/L
Body	SKIN PLATE	SKIN PLATE	SKIN PLATE	SKIN PLATE	SKIN PLATE
Power supply	230V ~ 50/60Hz	230V ~ 50/60Hz	230V ~ 50/60Hz	230V ~ 50/60Hz	230V ~ 50/60Hz
Height	634 mm (24.9 in)	616mm (24.2 in)	708mm (27.8 in)	720 mm (28.3 in)	753mm (29.6 in)
Width	407mm (16 in)	425mm (16.7 in)	416mm (16.3 in)	491mm (19.3 in)	541mm (21.2 in)
Depth	331mm (13 in)	425mm (16.7 in)	466mm (18.3 in)	541mm (21.2 in)	591mm (23.2 in)
Shipping weight	34 kg (74.9 lb)	37 kg (81.5 lb)	43 kg (94.7 lb)	49 kg (108 lb)	52 kg (114.6 lb)
Tank capacity	14 L (3.6 us gal)	20 L (5.2 us gal)	29 L (7.6 us gal)	44 L (11.6 us gal)	52 L (13.7 us gal)
Ice bank	7 kg (15.4 lb)	10 kg (22 lb)	14 kg (30.8 lb)	21 kg (46.2 lb)	25 kg (55.1 lb)
Compressor	1/5 Hp	1/4 Hp	1/3 Hp	1/2 Hp	3/4 Hp
Compressor cooling power	400 W (*)	513 W (*)	570 W (*)	905 W (*)	1280 W (*)
Refrigerant	R134a / R290	R134a / R290	R134a / R290	R134a / R290	R134a / R290
Carbonation pump	200 l/h (60 us gph)	200 l/h (60 us gph)	300 l/h (100 us gph)	300 l/h (100 us gph)	300 l/h (100 us gph)
Carbonation pump motor	120W	120W	200 W	200 W	200 W
Carbonator volume (total)	1100 cc	1100 cc	1600 cc	2000 cc	2000 cc
Coil material	AISI 304 STAINLESS STEEL (**)	AISI 304 STAINLESS STEEL (**)	AISI 304 STAINLESS STEEL (**)	AISI 304 STAINLESS STEEL (**)	AISI 304 STAINLESS STEEL (**)

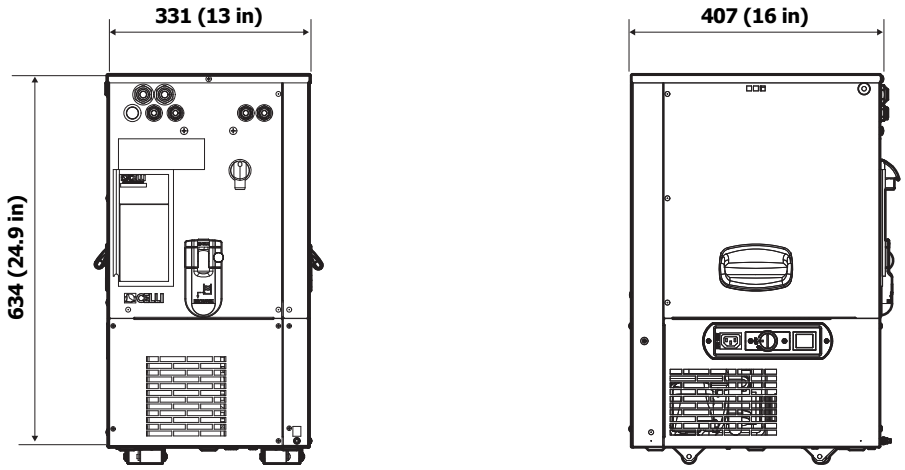
(*) ENVIRONMENTAL TEMPERATURE 32°C
(**) PICKLED AND PASSIVATED

3.4.1 Sound emissions

The machine is designed and built in such a way as to reduce the noise level at the source.
The weighted sound pressure level "A" is lower than 70 dB (A).

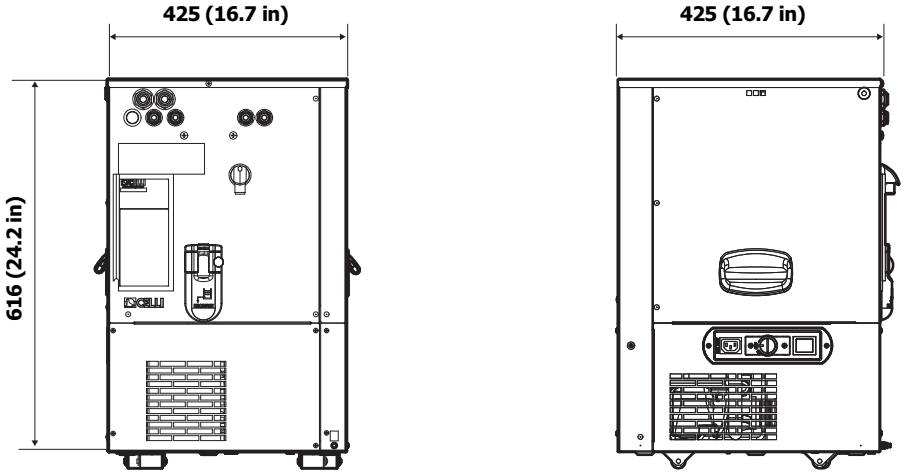
3.5 Dimensions in mm (inches)

3.5.1 TE MIX-15/L



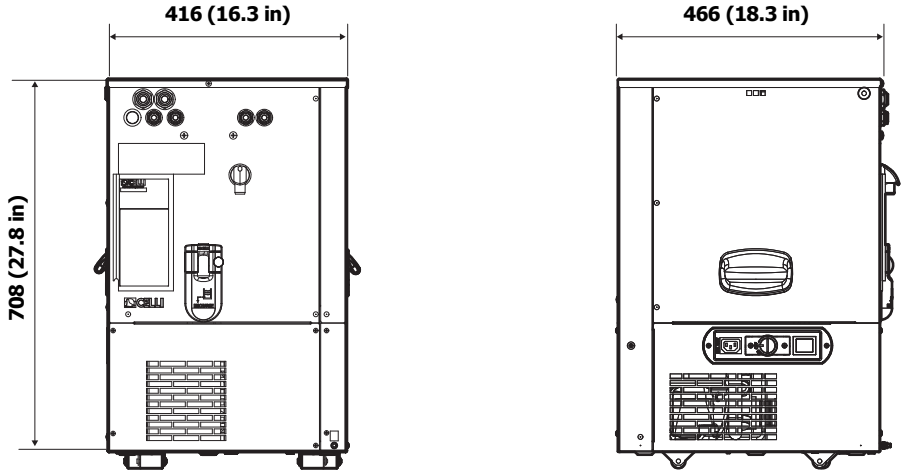
TE0120

3.5.2 TE MIX-25/L



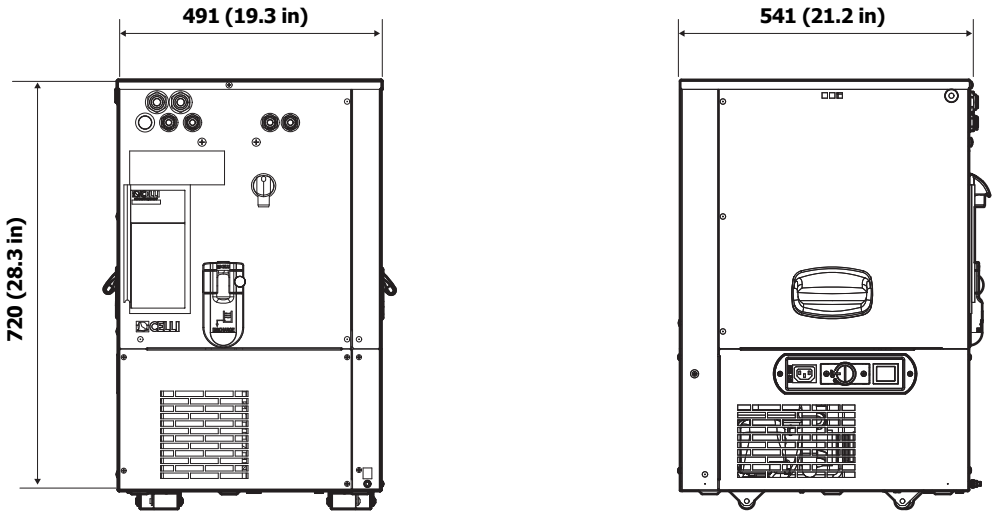
TE0130

3.5.3 TE MIX-35/L

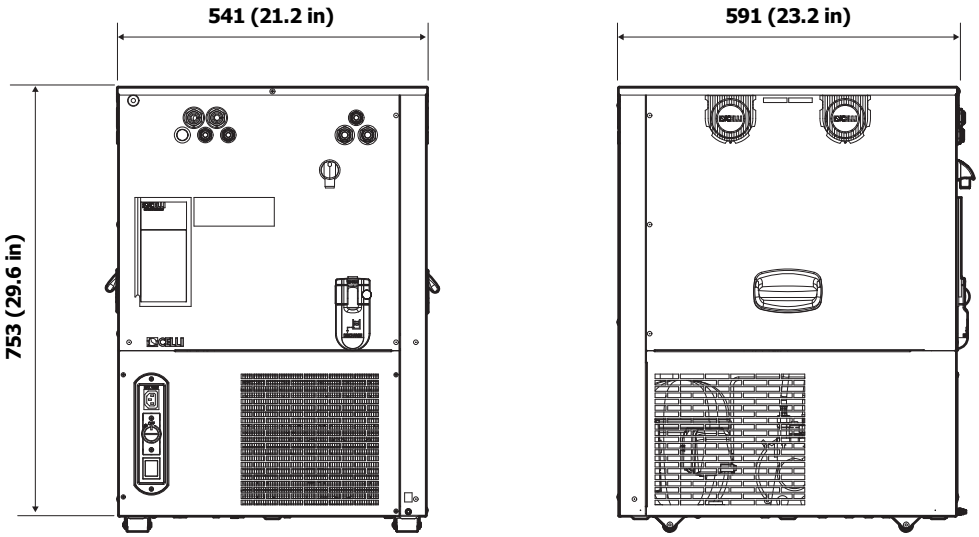


TE0140

3.5.4 TE MIX-50/L



3.5.5 TE MIX-65/L

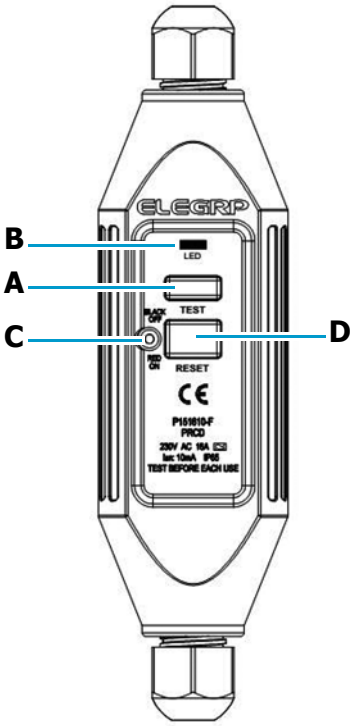


3.6 Differential-switch power cord (optional)

The differential switch is a safety device designed to cut off power to the machine in the event of a ground fault (electrical leakage) or phase-ground electrocution, thus protecting the people at risk against both direct and indirect electric shock. It does not offer any protection against overload or short circuit between phase and neutral.

The differential switch is equipped with a TEST (**A**) button that allows you to verify its proper functioning (test before each use).
When you press the TEST button, the power supply to the machine is cut off; the LED (**B**) turns off and the indicator light (**C**) next to the RESET (**D**) button (D) turns black.

Press RESET to reset the differential switch: the machine will be powered, the LED will turn on and the indicator light next to the RESET button will turn red.





4 - Installation

4.1 Checks and Unpacking

Always check that the appliance received is as stated in the accompanying document.
The machine is shipped in a cardboard box. Once the packaging has been removed, check the machine has not been damaged in transit; if damage is found, notify the carrier.

CELLI S.p.A. declines any liability in the event of damage in transit.

Users are advised to contact CELLI S.p.A. or authorised dealers for genuine components or spare parts.



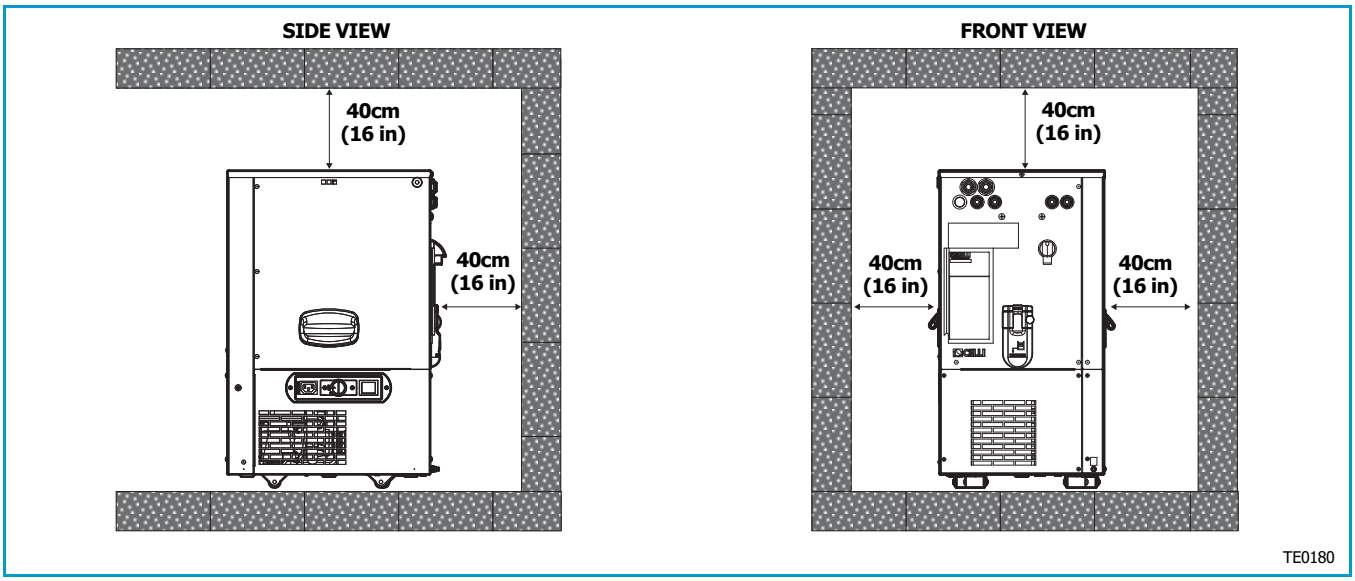
TE0170

The machine's packaging consists of a cardboard box and a suitable amount of padding material. Dispose of this in accordance with the relevant local legislation. Do not burn packaging components or dump them in the environment.



4.2 Positioning

The machine must be placed in a hygienically suitable environment, on a surface capable of bearing the weight of the dispenser complete with water. The chosen position must in any case allow satisfactory ventilation; in particular, there must be a gap of at least **40cm** (16 in) around the back and top for ventilation.
The machine must not be placed close to direct or indirect heat sources (ovens, stoves, radiators, etc.). The electricity and water supply points must be close to the dispenser, and located so that the power cable and water hose do not form an obstruction.



4.3 Environmental conditions

The appliance must be installed protected from rain and water splashes, and in a location with the temperature appropriate to its climate class (stated on the EC nameplate); otherwise warranty rights are forfeited and malfunctions may occur.
The possible climate classes are:

SN - For ambient temperatures from 10°C to 32°C
N - For ambient temperatures from 16°C to 32°C
ST - For ambient temperatures from 18°C to 38°C
T - For ambient temperatures from 18°C to 43°C

CAUTION



LOW TEMPERATURE

If the machine is exposed to temperatures below 0°C, the water inside it may freeze and cause damage to the machine itself.



4.4 Electrical requisites

Check that all electrical equipment complies with the data provided on the appliance's nameplate.

DANGER



MAINS ELECTRICITY

Always disconnect the machine from the electricity supply before doing any work on it, to prevent damage and health hazards.

CAUTION



ELECTRICAL REQUISITES

The electrical circuit must be correctly earthed and connected by means of a suitable differential safety breaker.

CAUTION



PLUG SUPPLIED

Connect the machine to the electricity mains using the plug provided.
If you need to replace the plug, use an equivalent model type-approved for the country of use.

If you need to use extensions, multiple sockets or adapters in general, use only material with a quality certification mark; the power rating of such material must always be higher than the machine's rated power absorption.



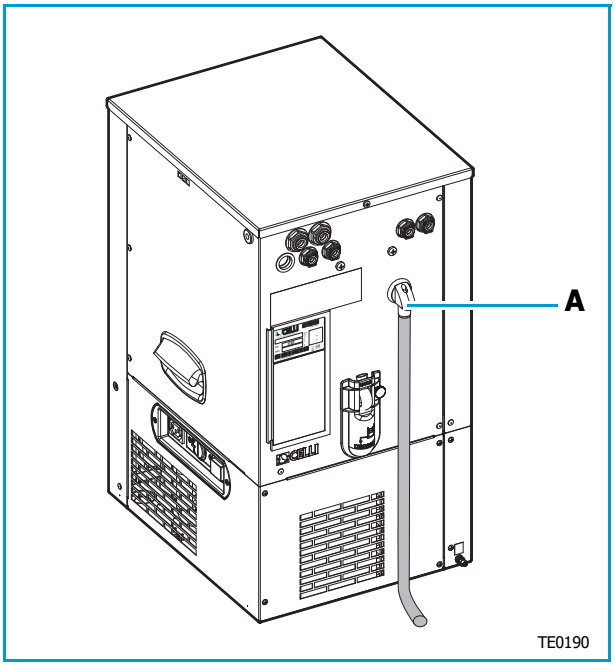
4.5 Connections

Carry out the connections described with the machine switched off and the power cord unplugged.

4.5.1 Preparing the machine

Overflow connection

Use a tube to connect the overflow drainage connector (**A**) of the tank to a drainage point or a large container. Check the overflow connector is not obstructed.

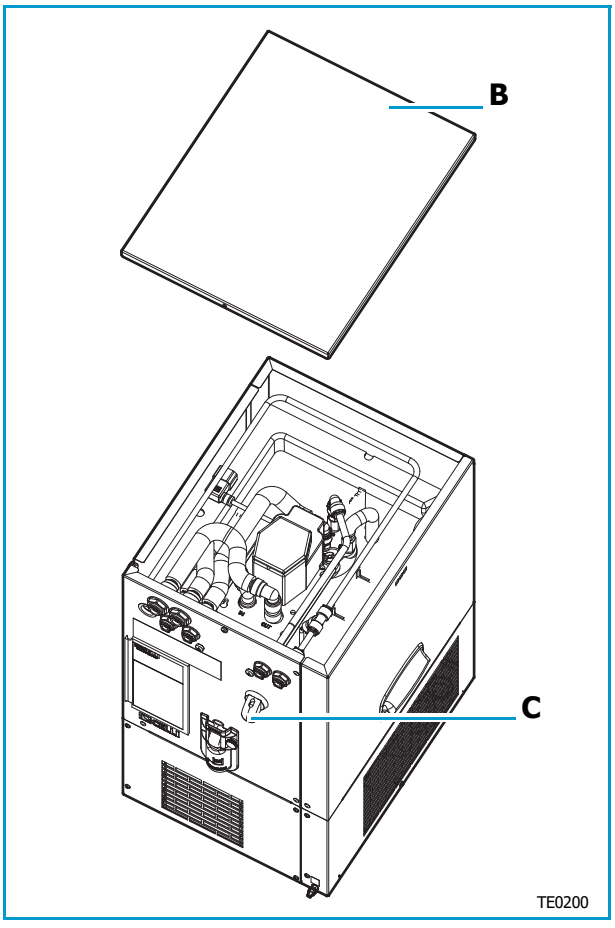


Filling the water tank

1 - Remove the upper cover (**B**) by loosening the fixing screws.

2 - Fill the tank with clean water until the level is about 2cm (1 in) below the hole (**C**) of the overflow connector.

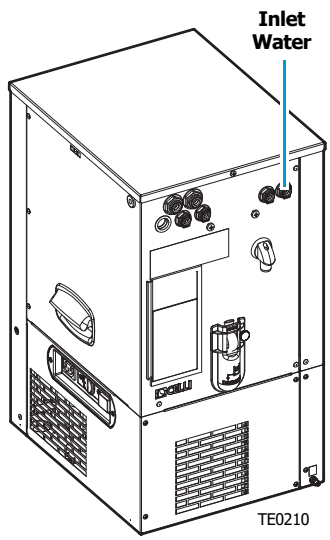
Make sure no foreign bodies are left in the tank.



4.5.2 Water intake connection

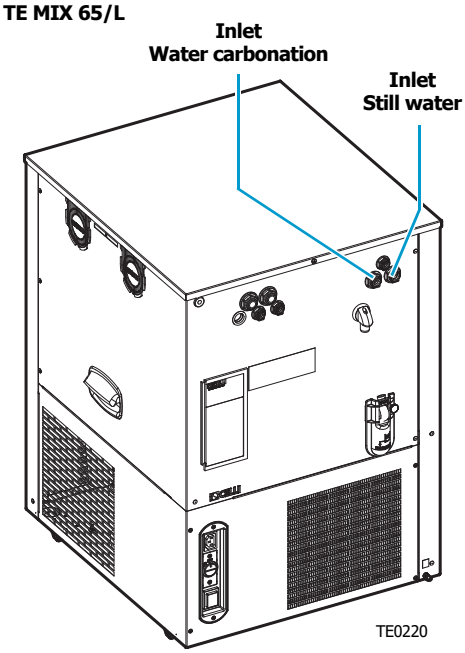
To facilitate the connections, the inlets and outlets are identified by special adhesives.

TE MIX 15-25-35-50/L



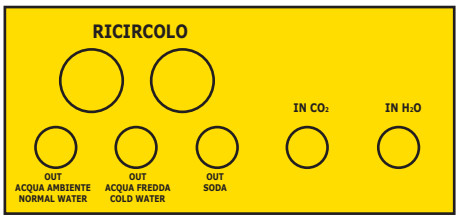
TE0210

TE MIX 65/L

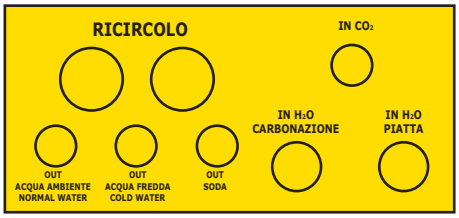


TE0220

LABEL IN/OUT TE MIX 15-25-35-50/L



LABEL IN/OUT TE MIX 65/L



TE0230

When connecting the machine to the water supply system, use only tubes and fittings certified for use with food, and in particular for contact with water destined for human consumption. Refer to the relevant regulations (in Italy Min. Decree 174/2004 - "Regulations concerning the materials and objects that can be used in fixed systems for the uptake, treatment, transfer and distribution of water intended for human consumption").

The machine should be connected to a supply line of drinking water (Leg, Decree 31/2001 implementing directive 98/83/CE regarding the quality of the water intended for human consumption).

To ensure a good flow of water from the dispenser, do not allow the tubes to come into contact with heat sources, and avoid any restrictions which may obstruct the water flow.

ACTIVATING THE FILTERS

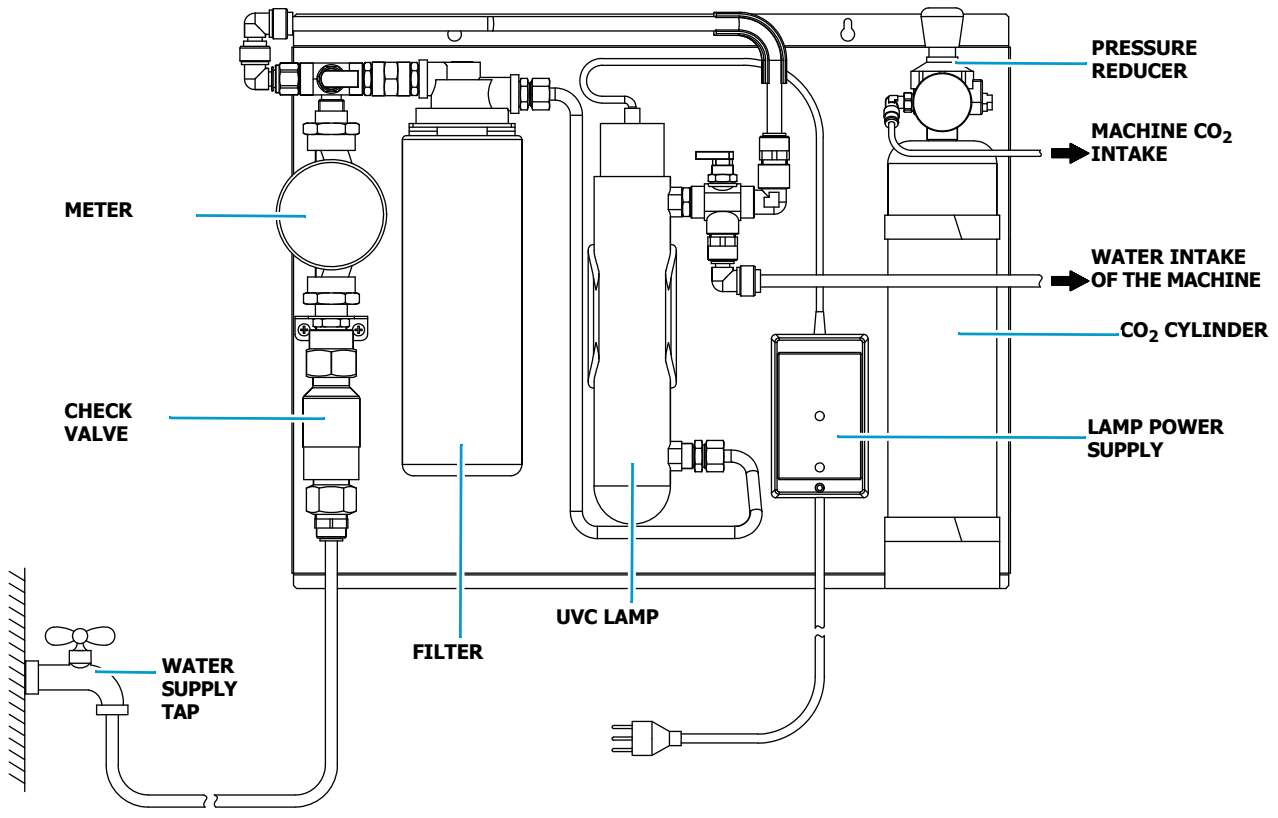
If a filter needs to be installed upstream of the machine, after fitting or replacing it, allow the water to flow from the drain tap, just after the filter, until all traces of cloudiness or sediment have disappeared. Do not use any water from the machine until this has been done.

For filter installation, lifetime and replacement procedure, always comply strictly with the instructions supplied by the filter manufacturer.

CAUTION

If the machine is connected to a filter, make sure that it respects current standards (in Italy there is a requirement of conformity with Min. Decree 25/2012 "Technical provisions regarding equipment for treating water intended for human consumption" and Min. Decree 174/2004 - "Regulations concerning the materials and objects that can be used in fixed systems for the uptake, treatment, transfer and distribution of water intended for human consumption").

EXAMPLE OF A CONNECTION TO THE WATER SUPPLY VIA THE FILTER



The filtering system must comply with the relevant local regulations (in Italy Min. Decree 25/2012 "Technical provisions regarding equipment for treating water intended for human consumption" and Min. Decree 174/2004 - "Regulations concerning the materials and objects that can be used in fixed systems for the uptake, treatment, transfer and distribution of water intended for human consumption".

To make the connection to the water system correctly, proceed as follows:

1 - Connect the machine's water intake to the water supply system, or to a filtering system.

Check there are no leaks in the water circuit.

2 - Connect the still water coil outlet and the soda outlet to the python.

The internal diameter of the water inlet tube must be at least 9.5mm.

The inlet water pressure must be between 2 and 4 bar.



4.5.3 Connections to dispensing taps

For the connection between the refrigerator and the dispensing point, it is recommended that materials used (connectors, tubes, dispensing taps) conform to current legislation (in Italy Min. Decree 174/2004 - "Regulations concerning the materials and objects that can be used in fixed systems for the uptake, treatment, transfer and distribution of water intended for human consumption".



4.5.4 Carbon dioxide (CO_2) connection

To facilitate the connections, the inlets and outlets are identified by special adhesives.

DANGER

CO_2 (CARBON DIOXIDE)

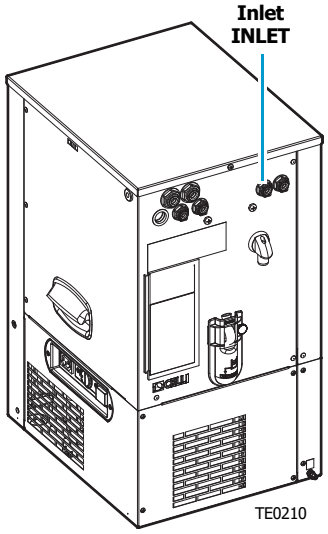
CO_2 bottles must always be stored in a well-ventilated place where the air can flow in and out. Great care must be taken to prevent CO_2 leaks throughout the system, including the gas bottles. If a CO_2 leak is suspected, especially in a small area, ventilate the contaminated area at once. Persons exposed to high concentrations of CO_2 will experience trembling, swiftly followed by unconsciousness and suffocation.

DANGER

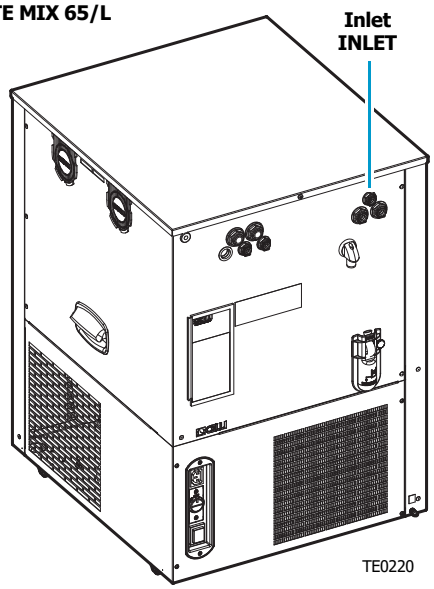
POSITIONING THE GAS BOTTLE

To prevent the risk of injury or damage, the CO_2 bottle must always be kept in a vertical position against a wall, held in place by a chain fixed to a bracket.
Do not expose the bottle to heat sources or very low temperatures.

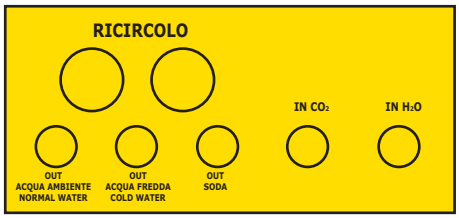
TE MIX 15-25-35-50/L



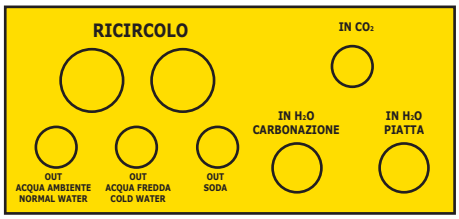
TE MIX 65/L



LABEL IN/OUT TE MIX 15-25-35-50/L



LABEL IN/OUT TE MIX 65/L



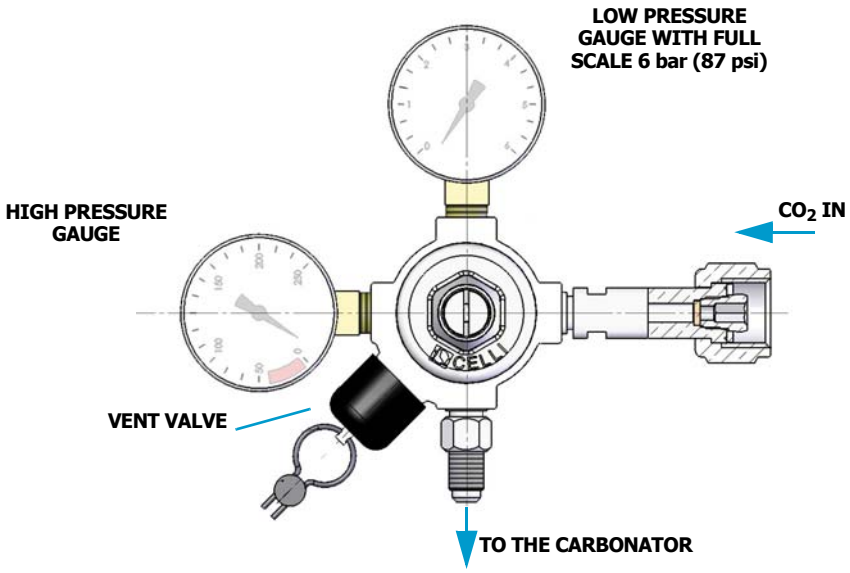
TE0230

Only super-dry food grade CO_2 should be used.

Before connecting the pressure regulator to the cylinder, check that there is no dirt on the valve. If so, remove it carefully.

There are different types of CO_2 bottles on the market.
Always obtain a pressure reducer suitable for the type of valve on the cylinder.

EXAMPLE OF CO_2 PRESSURE REDUCER



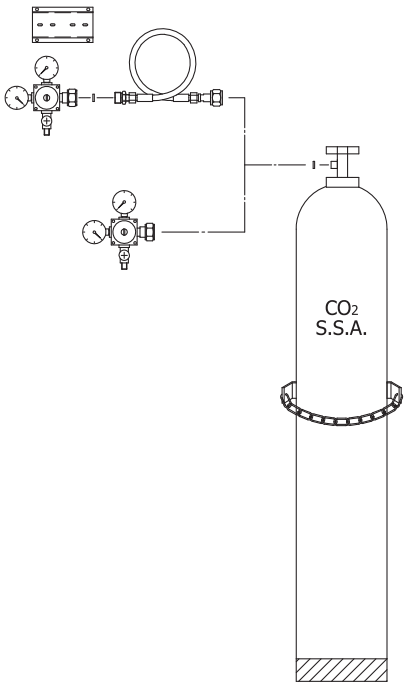
To make the carbon dioxide connection correctly, proceed as follows:

1 - Check the pressure reducer adjuster screw is fully loosened.

2 - Connect the pressure reducer to the bottle valve using the gasket provided.
If you are using a high pressure tube for the connection, ensure that the correct gaskets are fitted on both joints. The reducer must be secured to the wall by means of a suitable wall bracket. Use a suitable spanner to firmly fix the reducer to the gas bottle, or the high pressure tube to the bottle and pressure reducer, if installed.

3 - Fit the hose onto the connection provided on the reducer and connect it from the pressure gauge to the connection in the rear of the machine.

EXAMPLE OF CO_2 BOTTLE REDUCER CONNECTION



Never exceed the pressure of 6.5 bar at the outlet of the reducer in order to prevent compromising the circuit.



4.5.5 Electrical connection

CAUTION



ELECTRICAL REQUISITES

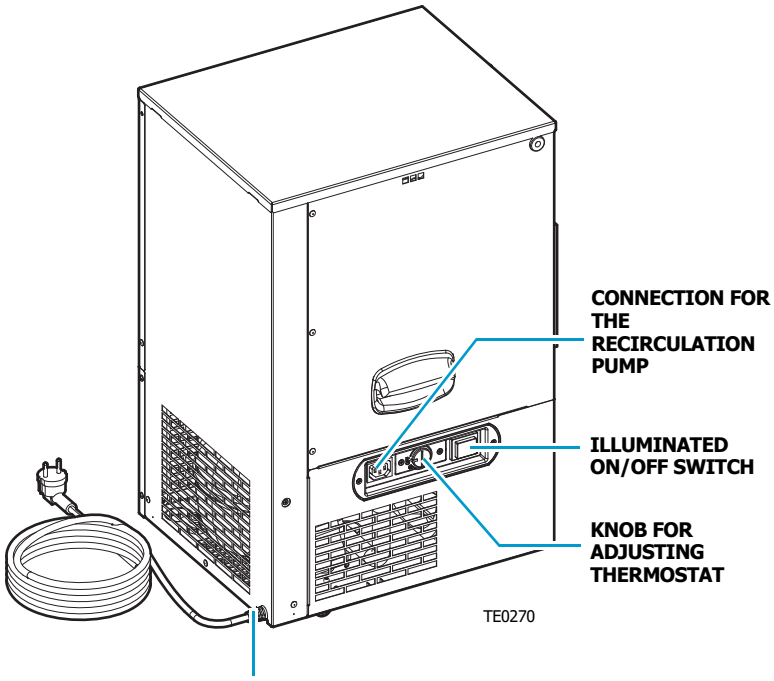
The electrical circuit must be correctly earthed and connected by means of a suitable differential safety breaker.

CAUTION



PLUG SUPPLIED

Connect the machine to the electricity mains using the plug provided.
If you need to replace the plug, use an equivalent model type-approved for the country of use.



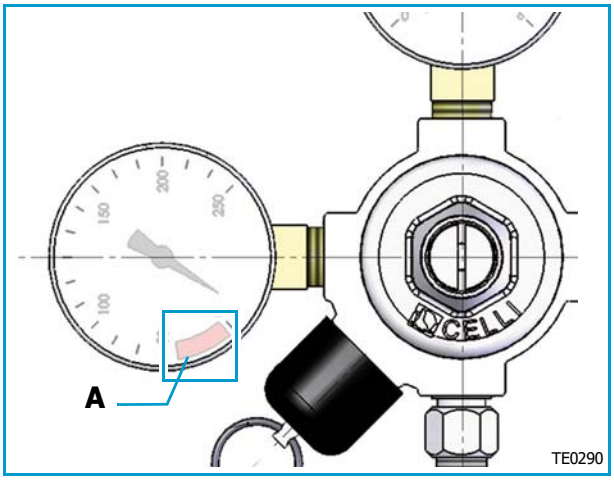
TE MIX machines conform to current safety standards and have a CE marking.

CAUTION

If the machine is installed in a kitchen, European Standard EN 60335-2/75 specifies that it must be connected to an equipotential circuit via a wire with a section measuring 2.5-10mm^2. This connection must be made by a skilled technician, in compliance with the regulations in force.



4.6 Adjusting the carbon dioxide (CO_2) supply



1 - Slowly open the valve of the CO_2 bottle until it is fully open. Check that the gas cylinder pressure is always above the red segment (**A** - low level) of the pressure reducer pressure gauge; otherwise, the cylinder will have to be changed.

2 - CO_2 supply to the machine: turn the adjuster screw until the needle of the corresponding pressure gauge reaches 4 bar (58 psi - 0.4 MPa). The setting chosen depends on the degree of carbonation required.

Connect the plug to a suitable power supply socket, checking that the characteristics of the electricity supply system correspond to the machine's technical data.

Check that the I/0 switch is on **I**.

Check that the fan and compressor are working.

After a few minutes, the surface of the condenser starts to heat up; check that this is happening.

If the fan unit and/or compressor are not working, call the after-sales service.



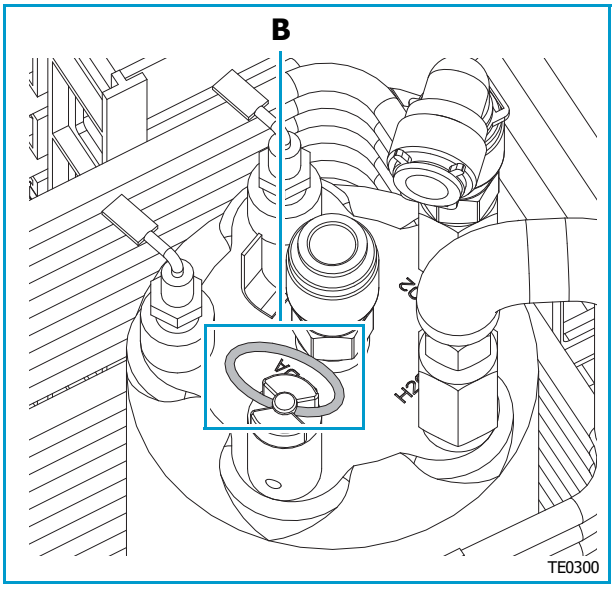
4.7 Checking for leaks

1 - Vent the air from the carbonator by opening the vent valve (**B**) until only water comes out.

2 - Check for gas leaks by pressurising the system and closing the gas cylinder valve.
Wait a couple of minutes, then check whether the reading on the pressure reducer pressure gauges has dropped below the set value.

3 - Check that there are no water or CO_2 leaks in the system.

4 - If no leaks are found, open the CO_2 cylinder valve and put the top panel back on the machine.





4.8 First start-up

When using the machine for the first time, you are advised to:
- carry out the system sanitisation procedure (see 6.8 - "How to sanitise the dispenser")
- dispense a few litres of water before using the dispenser
This is essential, in order to flush out the internal circuits and ensure that the machine has been prepared correctly.



5 - Using the machine



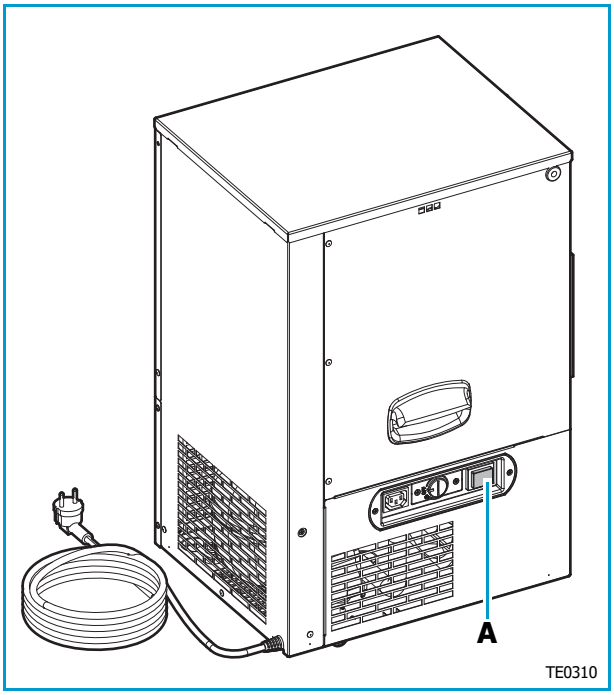
5.1 Start-up

1 - Connect the machine to the electrical mains by inserting the plug in the nearest power supply socket.

2 - Press the I/0 switch onto I (**A**).

3 - Wait the length of time needed for the ice bank to form (about 3 hours), and for the cooling unit to get up to its optimum working speed.

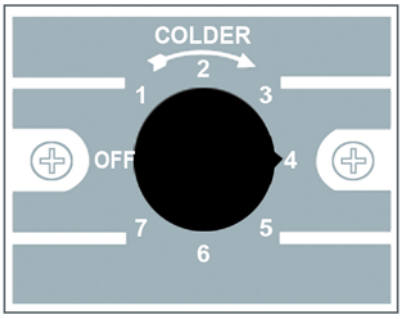
At this point, you can dispense water.



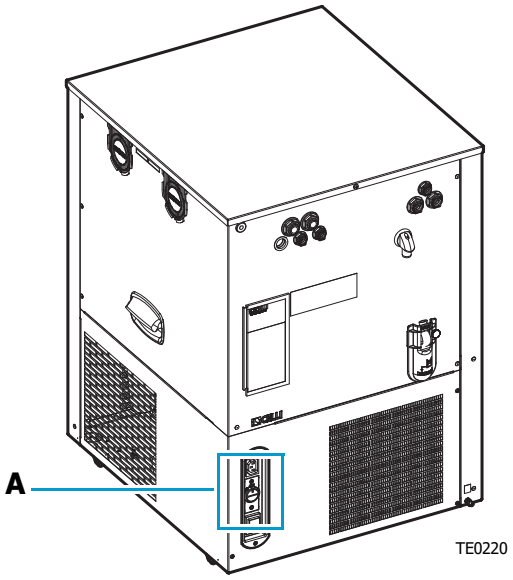


5.1.1 Setting the temperature

The temperature of the water dispensed can be adjusted via a thermostat (**A**) below the front panel of the machine. Turn the knob clockwise for colder water or anticlockwise for less cold water; If the thermostat knob is turned fully clockwise, the ice bank will form.



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5.2 Stopping the machine

REGULAR STOPS

If the machine is to be left unused for a medium-long period, disconnect the plug from the electricity mains.

Disconnect the machine from electricity sources and protect from heat and bad weather. Cover it so that dust and/or splashes of any kind cannot damage it. Turn off the water supply and the valve of the CO_2 bottle.

If the machine needs to be shipped, stored or moved, the circuit must be sanitised (see 6.8 - "How to sanitise the dispenser").
All the water must be removed; very low temperatures might freeze any residues of sanitiser solution or water, which are hazardous since they may damage internal components.

If the machine is out of order due to a fault or maintenance, or for any other reason, you are advised to inform everyone of this fact by affixing a sign.



6 - Maintenance

This chapter contains the complete list of requisites and procedures relating to machine maintenance. Proper maintenance requires daily checks and inspections by the operative and/or staff trained in routine maintenance, and regular procedures including cleaning, adjustment and replacement operations carried out by authorised skilled technical staff.

When replacing components, use only genuine CELLI spare parts.

If the information or procedures in this chapter are not clear, contact CELLI S.p.A. for explanations before proceeding.

If machine maintenance is carried out in such a way as to breach the instructions supplied, using non-original parts or without the written authorisation of the manufacturer, or in any way such as to damage the machine or modify its characteristics, CELLI S.p.A. cannot be held liable for the safety of persons or machine malfunctioning.
Any unauthorised modification invalidates the contractual warranty.

Do not carry out any procedure, modification or repair of any kind that is not indicated in this manual.

DANGER



MAINS ELECTRICITY

Always disconnect the machine from the electricity supply before doing any work on it, to prevent damage and health hazards.



6.1 Routine maintenance

To always ensure good machine operation, certain maintenance procedures (described below) are required.

DAILY MAINTENANCE PROCEDURES:

1 - Inspection of pipelines

check the tubes of the water, CO_2 and drain lines are not obstructed or crushed.

2 - Set CO_2 supply and pressure check

check the CO_2 sources are full and in good working order, and that the set pressure values are correct (see 4.6 - "Adjusting the carbon dioxide (CO2) supply").



6.1.1 Cleaning

To keep the machine in good condition, it should be cleaned every day.
Remove any marks using a cloth wet with warm water and neutral detergent, drying thoroughly before putting the machine back into operation.
Do not wash the machine with solvents, alcohol, etc. as this may damage external or internal parts.

Do not clean the machine with water jets, which might reach electrical parts.



6.2 Extraordinary maintenance

Extraordinary maintenance procedures are those performed in response to failures or malfunctions, and which may involve the replacement of certain components by authorised, skilled technical staff.

All extraordinary maintenance interventions must be carried out by CELLI-authorised technical personnel.



6.3 Table of procedures

The table below details the maintenance procedures required at the stated intervals. These periods refer to normal conditions of use.

Maintenance Check Table								
	Operation required				Needed every			
Component	**Inspection**	**Replacement**	**Sanitisation**	**Cleaning**	**at end of day**	**3 months**	**6 months**	**1 year**
ROUTINE MAINTENANCE								
CO_2 gas bottle (chapter "6.4" pag. 39)		✓			**as necessary**			
Water filter (if any) (chapter "6.5" pag. 39)		✓			**manufacturer's recommendations**			
UV lamp (if any) (chapter "6.7" pag. 40)		✓			**manufacturer's recommendations**			
Condenser (chapter "6.7" pag. 40)				✓		✓		
Dispenser (chapter "6.8" pag. 41)			✓				✓	
Liquid check valve (chapter "6.9" pag. 43)	✓							✓
Check for leaks (chapter "4.7" pag. 33)	✓							✓
Replacing the water in the tank (chapter "6.10" pag. 44)		✓						✓
EXTRAORDINARY MAINTENANCE								
	Specialised CELLI technician							



6.4 Replacing the carbon dioxide (CO_2) bottle

When the needle of the reducer high pressure gauge is in the red segment, the bottle needs replacing.

1 - Note down the pressure values set on the pressure reducer, then fully close the bottle using its valve.

2 - Slowly loosen the nut of the pressure reducer or the high pressure hose connected to the cylinder. Verify that the cylinder pressure is zero. Remove the pressure reducer (or disconnect the high pressure hose from the cylinder, if present). Check the condition of the gaskets between the reducer and the cylinder or between the high pressure hose and the cylinder. If the gasket is deformed or cracked, call a specialist for replacement.

3 - Replace the CO_2 cylinder, restore the connections, open it slowly and make sure there are no leaks and then fully open the valve and check that the pressure values are those set initially.

Once you have replaced the cylinder, check that there are no leaks. CO_2 is an asphyxiant gas, heavier than air, and it tends to accumulate in enclosed areas (chapter "4.5.4" pag. 29).



6.5 Replacing the water filter (when present)

For the times and procedures for changing the water filter cartridge, follow the instructions provided by the filter manufacturer.

After fitting or replacing the filter, allow the water to flow from the drain tap (just after the filter) until the water leaving the machine is free from all cloudiness or sediment. The machine must not be supplied with filtered water until this has been done. It is recommended that filters conforming to current legislation are used (in Italy conformity is required with Min. Decree 25/2012 "Technical provisions regarding equipment for treating water intended for human consumption" and Min. Decree 174/2004 - "Regulations concerning the materials and objects that can be used in fixed systems for the uptake, treatment, transfer and distribution of water intended for human consumption".



6.6 Replacing the UV lamp (when present)

For times and procedures for changing the UV lamp, follow the instructions provided by the lamp manufacturer.



6.7 Cleaning the condenser

The build-up of dust and grease on the cooling condenser may cause overheating, and this in turn could damage the compressor beyond repair.
The condenser must always be cleaned when necessary.

1 - Disconnect the machine from the electricity supply.

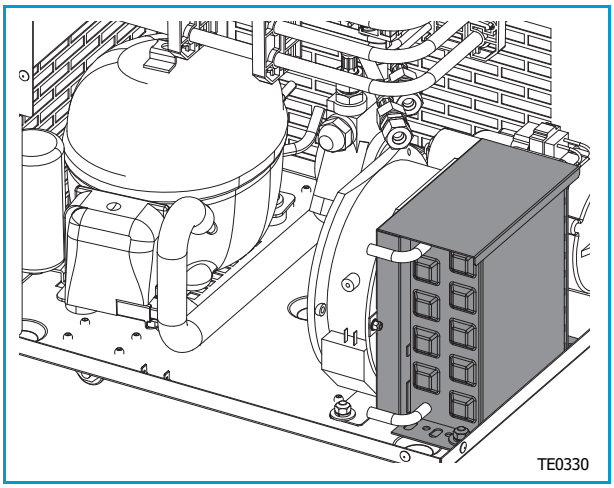
2 - Remove the front/side panel.

3 - Use a soft brush, a vacuum cleaner or low-pressure compressed air to clean the condenser fins.

4 - Remove any dust from the cooling and electrical components.

5 - Refit the upper panel.

6 - Reconnect the machine to the electricity supply.


TE0330

Do not use high pressures, as they may bend the condenser fins.



6.8 How to sanitise the dispenser

CAUTION

SANITISATION
Before carrying out the sanitisation, carefully read the instructions provided by the manufacturer of the sanitising product, be sure to use personal protective equipment (gloves, masks, etc.). Make sure that the rooms are ventilated properly.
Sanitisation of product lines must only be carried out by qualified technical service staff.

It is good practice to completely sanitise the dispenser upon first start-up and however every 6 months, contacting the Dealer or an Authorised Technical Service centre.

Sanitisation must also be carried out in case of prolonged non-use (greater than 3 days) of the machine.

For short periods of non-use (2-3 days), it is recommended to dispense a few litres of water before using the machine.

Use cleaning agents or disinfectants approved for use in food industry.

It is recommended to alternate neutral/slightly alkaline cleaning agents (e.g. liquid low-foam detergents for industrial dishwashers) for removing the organic substances, with agents containing citric or phosphoric acid for the removal of inorganic substances.

The cleaning solution should be prepared by mixing detergent with tap water according to manufacturer's instructions (20-40°C).

The sanitising solution should be prepared by mixing 5 g of 4% sodium hypochlorite solution (eg. unscented bleach, bleach) per liter of tap water (20-40°C). Use the solution within 10 minutes after preparation. When using disinfectants with other active ingredient, follow the manufacturer's instructions.

CAUTION

After having flushed the lines with the sanitising solution, allowing it to act for the necessary time, you must rinse throughly with clean water to make sure that all traces of sanitising agent have been eliminated completely.
Never exceed the maximum contact times and the maximum concentration specified by the manufacturer.

PROCEDURE

1 - Switch off the machine and dispense through the taps until the system is completely empty.

2 - Disconnect the water inlet pipe from the mains and connect it to the barrel containing the cleaning solution.

3 - Switch on the machine and dispense until the cleaning solution (typically after 30 seconds or if the coil is present, after further 15 seconds/5 meters of coil per line). Open the taps for 15 seconds, pause for 5 seconds; repeat 4 times. Reopen the taps for about 30 seconds.

4 - Switch off the machine and dispense through the taps until the system is completely empty.

5 - Disconnect the barrel containing the cleaning solution and connect the mains water inlet pipe. Switch on the machine and rinse thoroughly, dispensing the fluid through each tap for at least 1 minute and, if the coil is present, dispense for another 30 seconds/5 meters of coil.

6 - Switch off the machine and dispense through the taps until the system is completely empty.

7 - Disconnect the mains water inlet pipe and connect it to the barrel containing the sanitising solution.

8 - Switch on the machine and dispense until the sanitising solution (typically after 30 seconds or if the coil is present, after another 15 seconds/5 meters of coil). Wait for 10 minutes, then open each tap for 30 seconds.

9 - Do not dispense for 10-15 minutes, to allow the sanitising solution to act.

10 - Switch off the machine and dispense through the taps until the system is completely empty.

11 - Disconnect the barrel containing the sanitising solution and connect the mains water inlet pipe. Switch on the machine and rinse properly by dispensing the liquid for at least 3 minutes (at least 5 liters) from still water taps and at least 6 minutes (at least 10 litres) from the sparkling water taps.



6.9 Cleaning and checking the liquid check valve

CAUTION



LIQUID CHECK VALVE

The carbonator liquid check valve should be inspected after any interruption in the water supply (plumbing work, earthquakes, etc.), and at least once a year in normal conditions. If particles are trapped in the control valve, the CO_2 might flow back into the water supply system.

1 - Disconnect the machine from the electricity supply.

2 - Remove the upper panel.

3 - Shut off the water and CO_2 supplies.

4 - Disconnect the water coil from the liquid check valve.

5 - Remove the liquid check valve (**A**).

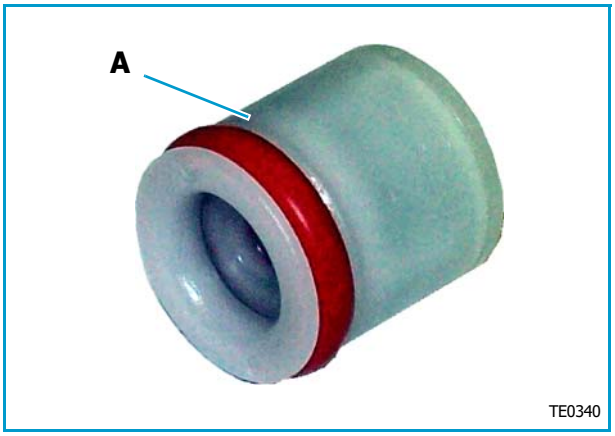
6 - Clean and check the O-rings and every single part, and in particular check there is no damage to the surface of the ball. Replace any damaged parts.

7 - Reassemble the liquid check valve (**A**), taking care to put it back in its original position.

8 - Turn on the water and CO_2 supplies.

9 - Refit the upper panel.

10 - Reconnect the machine to the electricity supply.





6.10 Replacing the water in the tank

1 - Disconnect the machine from the electricity supply.

2 - Remove the upper cover.

3 - Wait until the ice bank has fully melted.

4 - Empty the tank via the drainage system (**A**).

5 - Loosen the fixing screw (**B**).

6 - Hold the upper end of the tube (**C**) firmly to avoid any liquid seeping out, then remove the plastic clip (**D**) from its seat, sliding it along the rubber tube.

7 - Firmly hold the tube upstream from the clip to avoid any liquid seeping out, then remove the plastic clip from the tube (**E**).



8 - Drain the liquid from the tank by releasing the tube (**F**).

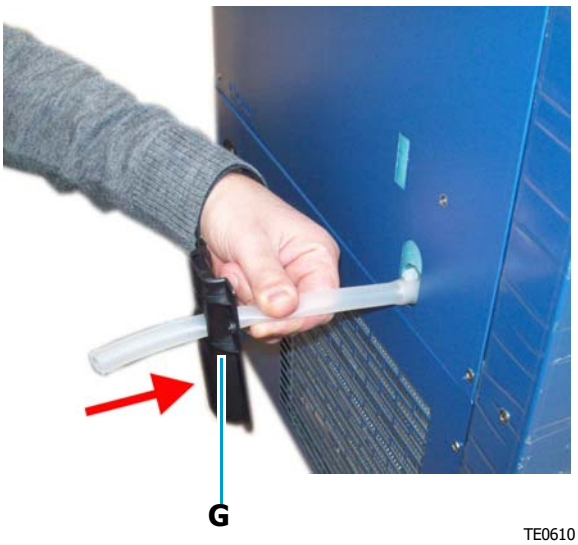
9 - Once the tank has been emptied, insert the tube in the lower slot of the plastic clip (**G**).

10 - Turn the tube and insert it in the front of the upper slot (**H**). Slide the tube so you can insert the plastic clip in its seat.

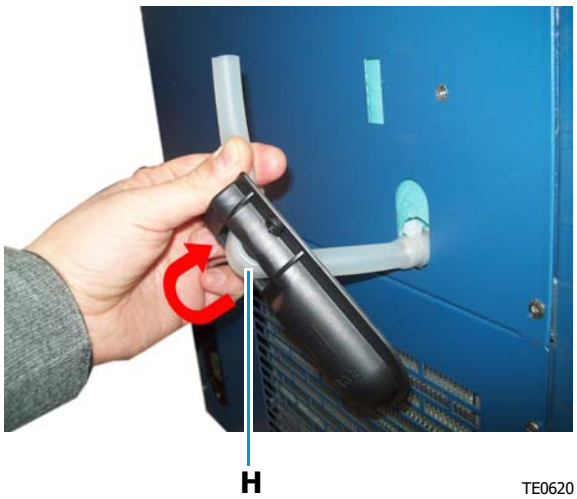
11 - Press the clip and insert the fixing screw (**I**). Tighten the screw, making sure the clip stays firmly in contact with the panel it is fixed to.



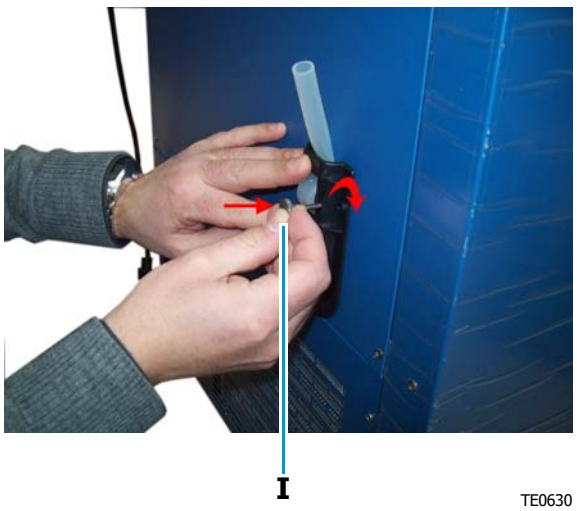
TE0600



TE0610



TE0620



TE0630

If the machine is to be left unused for a long time, always empty the tank.

CAUTION

Do not put your hands inside the tank if the machine is running.



7 - Troubleshooting

PROBLEMS FOUND	PROBABLE CAUSE	REMEDIES
The dispenser does not start up	Power supply failure	Check that power is present. If the power is OK, call an authorised technician.
	Thermostat failure	Call an authorised technician
The cooling unit operates continually, and the water delivered is warm	Refrigerant gas leak	Call an authorised technician
The cooling unit operates continually, and the water freezes	Thermostat failure	Call an authorised technician
Noisy water pump	Water supply failure	Check that water is reaching the machine
The dispenser does not deliver water	Main water tap turned off	Turn on the water tap
	Water supply connection tube crushed or obstructed	Inspect the path of the tube
	No electricity supply	Check the plug is well inserted
The dispenser does not deliver sparkling water	CO_2 cylinder has run out	Replace the CO_2 cylinder
	Electronic control unit malfunction	Call an authorised technician
	Pump failure	Call an authorised technician
	CO_2 cylinder shut off	Open the CO_2 cylinder valve
FOR ANY OTHER PROBLEMS NOT COVERED HERE, CONTACT THE SERVICE CENTRE		

8 - Additional instructions

8.1 Waste disposal

Please note that residues from industrial processing are to be considered special waste that, in terms of quality or quantity, are not intended as municipal waste.
Deteriorated or obsolete machines are also special waste.

The user, in accordance with national legal regulations, will have to take special precautions regarding the disposal of materials, such as:

- Guards' material (PVC, acrylic)
- Plastic of pneumatic pipes
- Coated wires
- Rubber belts
- Used oil
- Refrigerant gas R134a (HFC)

8.2 Dismantling of the machine

The operations of removal and demolition must be performed by qualified personnel.

The machine must be dismantled after disassembling of the various parts, and recovery of refrigerant, if the same is R134a.

For disassembly, wear the personal protective equipment mentioned in the user's manual, and also refer to the instructions and diagrams in this manual, or request specific information to the manufacturer.

CFC, HCFC and HFC refrigerant gases cannot be discharged into the atmosphere, but must be collected and recovered for disposal or recovery as special hazardous waste (under the CER code 140601*).

The above gases must be sent to companies authorised to dispose of such products.

Once you have disassembled the various parts, sort the different components, separating metal from plastic, copper etc., depending on the type of differentiated disposal regulations in force in the country where the machine is dismantled.

The waste resulted from the demolition of the machine can be classified as special waste.

If the various components should be stored awaiting admission into landfills for recovery, pay attention to keep them in a safe place and protected from the weather, to prevent soil and groundwater contamination.

Dispose of the waste following the local regulations in force on waste disposal.

8.3 Disposal of electronic equipment (WEEE directive)

The EU Directive 2002/96/EC (WEEE), requires manufacturers and users of electrical and electronic equipment a number of obligations relating to the collection, treatment, recovery and disposal of such waste. It is recommended to strictly follow the said rules for disposal of such waste. Illegal dumping of the product by the user entails the administrative sanctions stated by current legislation.

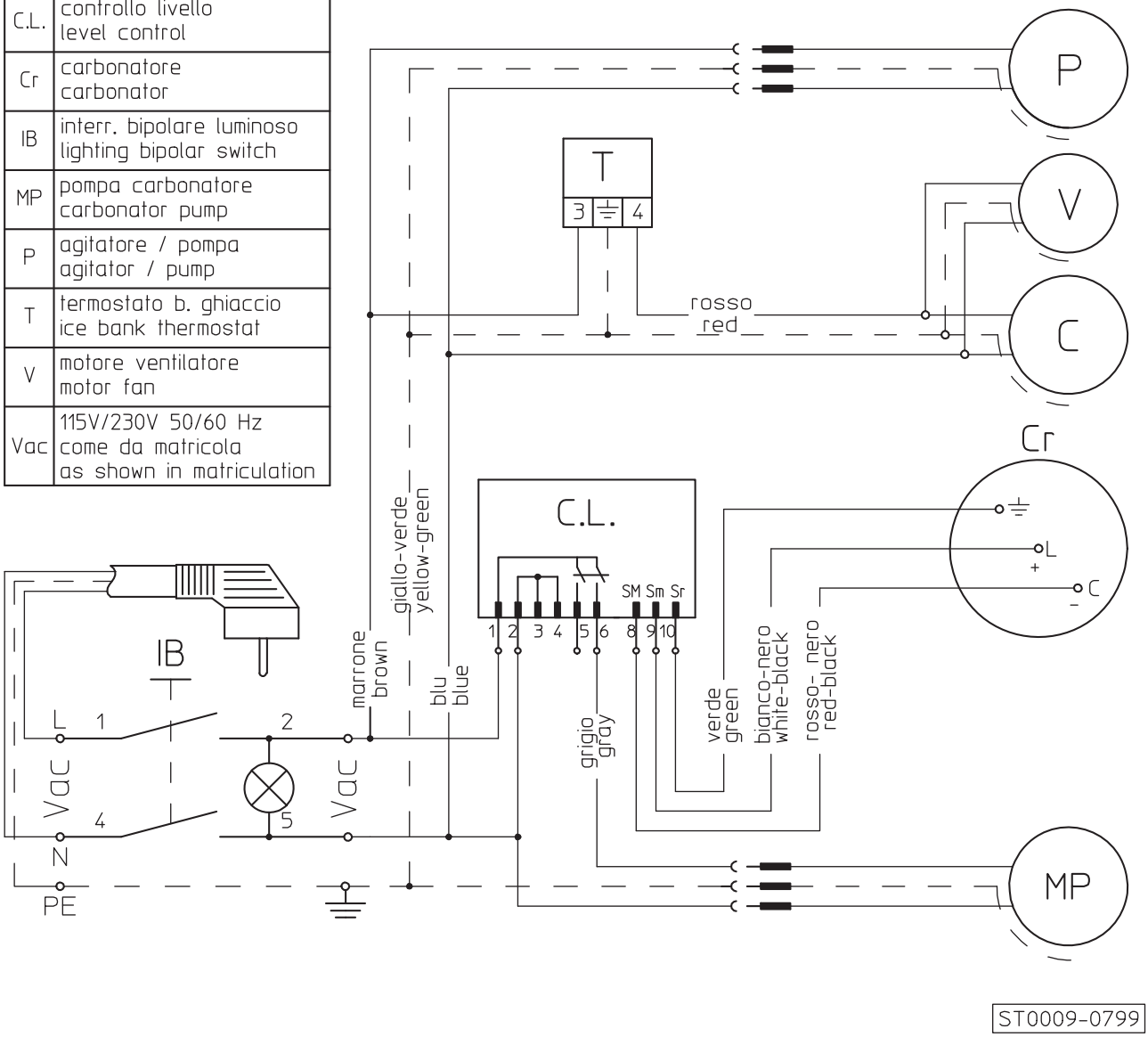




9 - Annexes

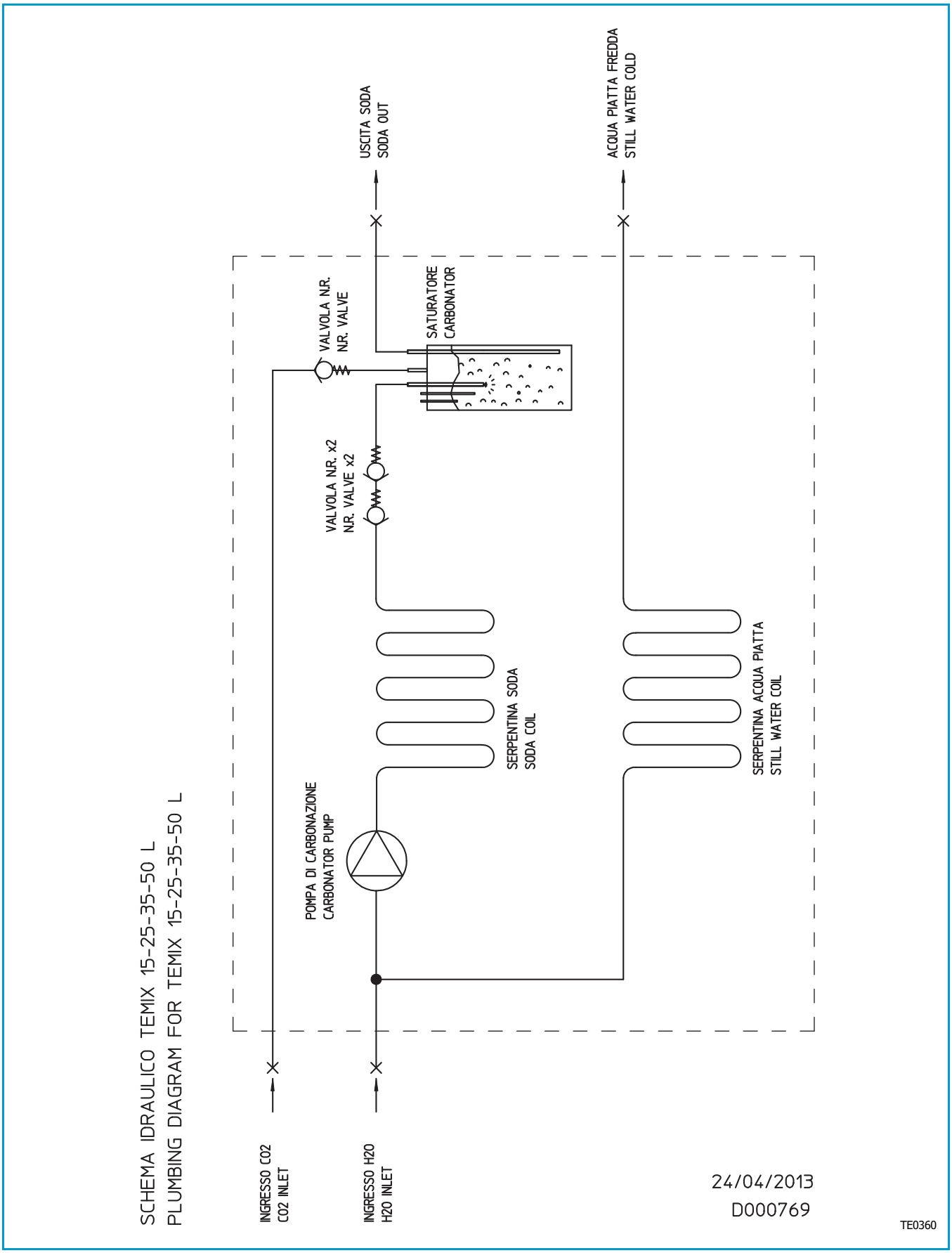
9.1 TE MIX 15 - 25 - 35 - 50 - 65/L wiring diagram

C	compressore compressor
C.L.	controllo livello level control
Cr	carbonatore carbonator
IB	interr. bipolare luminoso lighting bipolar switch
MP	pompa carbonatore carbonator pump
P	agitatore / pompa agitator / pump
T	termostato b. ghiaccio ice bank thermostat
V	motore ventilatore motor fan
Vac	115V/230V 50/60 Hz come da matricola as shown in matriculation

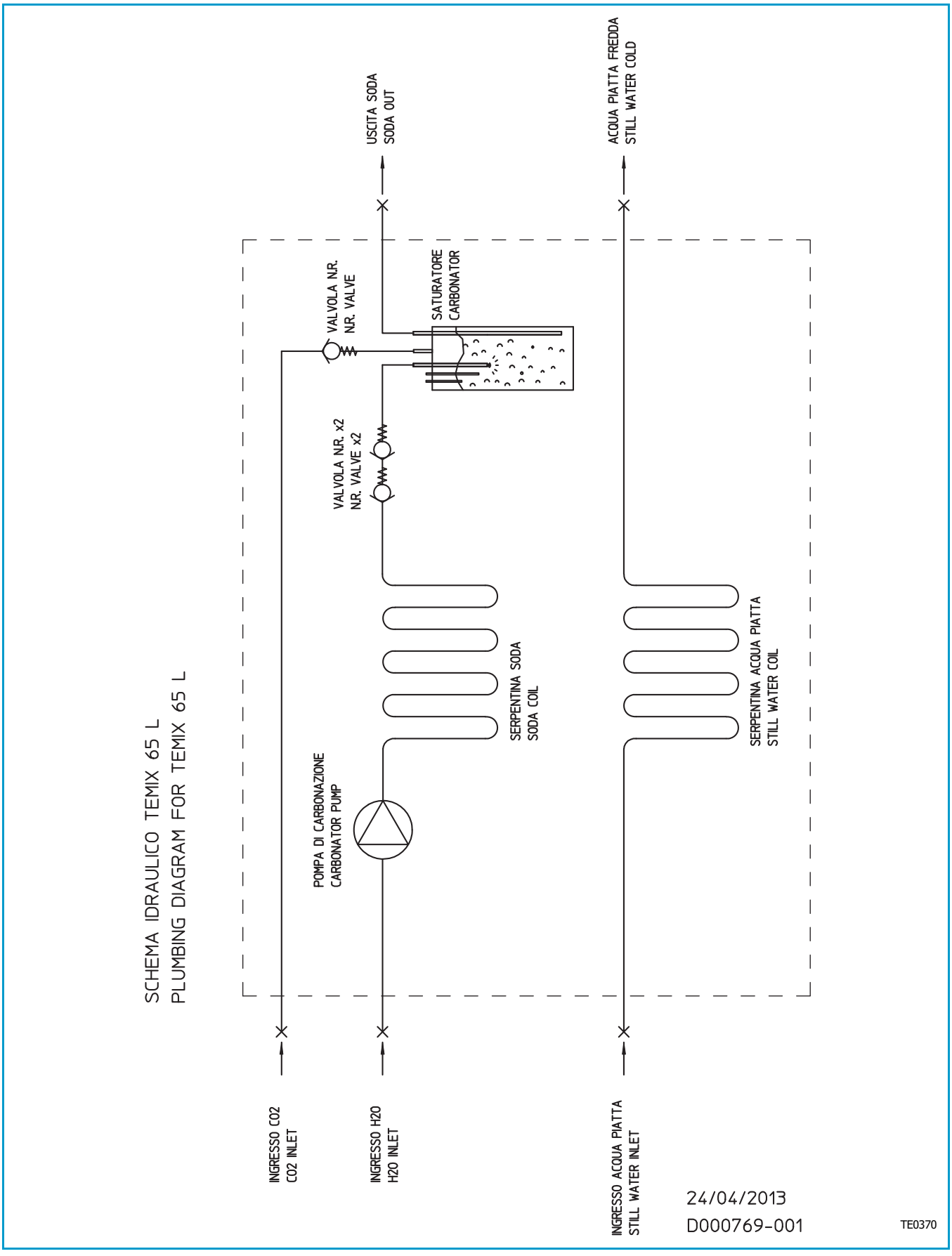


The electrical diagram can also be found on the inner part of the insulating tank cover. Refer to that diagram if there are any differences compared with the one above.

9.2 TE MIX 15 - 25 - 35 - 50/L hydraulic diagram



9.3 TE MIX 65/L hydraulic diagram



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